Attorney Docket No.: Q77349

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/665,006

REMARKS

In the present Amendment, Claims 1, 4 and 5 have been amended to delete the word "about." No new matter has been added, and entry of the Amendment is respectfully requested.

Claims 1-5 are pending.

As a preliminary matter, the Examiner is respectfully requested to return an initialed copy of the Form PTO/SB/08 filed with Applicants' Disclosure Statement of March 1, 2004, and to indicate that the listed document has been considered and made of record. It has been over four years since the IDS in question was filed.

At page 2 of the Action, Claims 1-5 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

As noted, the claims have been amended to address the Examiner's concern. Withdrawal of the § 112 rejection is respectfully requested.

At page 3 of the Action, Claims 1-5 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hunt et al (US 2,776,996) in view of SUMITOMO CHEM. COMP. LTD (GB 1,166,961, "GB '961").

Applicants submit that this rejection should be withdrawn because Hunt et al and GB '961 do not disclose or render obvious the present invention, either alone or in combination.

Claim 1 as amended recites that the basic compound is used in an amount of 0.3 mol or less per mol of the acidic compound.

Both Hunt et al and GB '961 fail to teach that a basic compound is used in an amount of 0.3 mol or less per mol of an acidic compound.

Specifically, Hunt et al teaches that "[t]he base should be in excess of acetic acid, when the reactants are mixed in continuous operation" (column 2, line 71 to column 3, line 14). That

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is, Hunt et al teaches that a basic compound is used in an amount of <u>more than 1 mol</u> per mol of the acidic compound in a continuous process. Hunt et al teaches away from the presently claimed recitation of a basic compound being used in an amount of 0.3 mol per mol of an acidic compound.

As to GB '961, Example 1 of GB '961 teaches that pyridine is used in an amount of 0.51 mol per mol of acetic acid.

Even if a prima facie case of obviousness could be established based on Hunt et al and GB '961, which it cannot, Examples 1 and 2 and Comparative Examples 1 and 2 of the present specification provide evidence of unexpectedly superior results which rebuts any prima facie case of obviousness and confirms the patentability of the present invention. Example 1 of the specification discloses using a mixture of an acetic acid and a pyridine having a molar ratio of acetic acid/pyridine of 1/0.13. Example 1 discloses that the resulting percentage of by-product 3-hydroxy-2-methylthiomethyl-4-pentenal is 0.24 % and the resulting percentage of by-product 2-methylthiomethyl-5-methylthio-2-pentenal is 0.06 %. Example 2 of the specification discloses using a mixture of an acetic acid and a pyridine having a molar ratio of acetic acid/pyridine of 1/0.15. Example 2 discloses that the resulting percentage of 3-hydroxy-2-methylthiomethyl-4-pentenal is 0.23 % and the resulting percentage of 2-methylthiomethyl-5-methylthio-2-pentenal is 0.06 %.

In contrast, Comparative Examples 1 and 2 of the specification disclose using a mixture of an acetic acid and a pyridine having a molar ratio of acetic acid/pyridine of 1/0.51.

Comparative Example 1 discloses that the resulting percentage of 3-hydroxy-2-methylthiomethyl-4-pentenal is 0.73 % and the resulting percentage of 2-methylthiomethyl-5-methylthio-2-pentenal is 0.10 %. Comparative Example 2 discloses that the resulting percentage

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of 3-hydroxy-2-methylthiomethyl-4-pentenal is 0.41 % and the resulting percentage of 2-methylthiomethyl-5-methylthio-2-pentenal is 0.12 %. In this regard, Comparative Examples 1 and 2 show that the processes thereof result in higher percentages of the by-products 3-hydroxy-2-methylthiomethyl-4-pentenal and 2-methylthiomethyl-5-methylthio-2-pentenal. A person of ordinary skill in the art would not have predicted or expected that the claimed amount of the basic compound would provide for superior (i.e., reduced) amounts of 3-hydroxy-2-methylthiomethyl-4-pentenal and 2-methylthiomethyl-5-methylthio-2-pentenal.

Moreover, Applicants submit that Examples 1 and 2 and Comparative Examples 1 and 2 of the specification also demonstrate the criticality of the amount of the basic compound. Comparative Examples 1 and 2 show that the processes thereof result in higher percentages of by-products 3-hydroxy-2-methylthiomethyl-4-pentenal and 2-methylthiomethyl-5-methylthio-2-pentenal.

In view of the above, reconsideration and withdrawal of the §103(a) rejection based on Hunt et al in view of GB '961are respectfully requested.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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